# CLAIMS

1. A method of determining the risk of an individual developing a metabolic disorder, the method comprising:

(i) detecting in a sample from the individual the presence or absence of the ER22/23EK polymorphism in the glucocorticoid receptor gene; and

(ii) determining the likelihood of the individual developing a metabolic disorder, wherein the presence of the ER22/23EK polymorphism is indicative of a low risk of developing the metabolic disorder and the absence of the ER22/23EK polymorphism is indicative of a high risk of developing the metabolic disorder.

2. A method according to claim 1 wherein the metabolic disorder is cardiovascular disease.

3. A method according to claim 1 wherein the metabolic disorder is glucose intolerance or diabetes mellitus.

4. A method of predicting the longevity of an individual, the method comprising:

(i) detecting in a sample from the individual the presence or absence of the ER22/23EK polymorphism in the glucocorticoid receptor gene; and

(ii) determining the life expectancy of the individual, wherein the presence of the ER22/23EK polymorphism is indicative of a long life expectancy.

5. A method of determining the dose of glucocorticoid for administration to an individual in need thereof, the method comprising:

(i) detecting in a sample from the individual the presence or absence of the ER22/23EK polymorphism in the glucocorticoid receptor gene; and

(ii) determining whether the dose of glucocorticoid for administration to the individual should be altered compared to the standard dosage, wherein the presence of the ER22/23EK polymorphism indicates that the dosage should be increased.

6. A method according to claim 5 wherein the individual is suffering

from an allergic disease, an antoimmune diesease, an inflammatory disorder, a neoplastic disease, graft rejection, sarcoidosis, vitamin D intoxication, thyroid storm, septic shock, cerebral edema, altitude sickness, chronic bronchitis or emphyseme.

7. A method according to claim 5 wherein the glucocorticoid is selected from Hydrocortisone, Prednisone, Prednisolone, Methylprednisolone, Triamcinolone, Dexamethasone, Budesonide, Betamethasone and Beclomethasone.

8. A method according to any one of the claim 1, 4 and 5 wherein step (i) comprises contacting a sample from the individual with a specific binding agent for the ER22/23EK polymorphism and determining whether the agent binds to the polymorphism.

9. A method according to claim 8 wherein the agent is a nucleotide binding agent.

10. A method according to claim 9 wherein the nucleotide binding agent is an oligonucleotide probe or primer.

11. A method according to claim 10 wherein the agent is a polypeptide binding agent.

12. A method according to claim 11 wherein the polypeptide binding agent is an antibody.

13. A method of determining whether a treatment regimen is suitable for an individual having a metabolic disorder, the method comprising:

(i) detecting in a sample from the individual the presence or absence of the ER22/23EK polymorphism in the glucocorticoid receptor gene; and

(ii) determining whether the treatment is suitable for the individual, wherein the suitability of the treatment depends on the presence or absence of the ER22/23EK polymorphism.

14. A method for diagnosing and treating an individual susceptible to a metabolic disorder, the method comprising:

(i) detecting in a sample from the individual the presence or absence of the ER22/23EK polymorphism in the glucocorticoid receptor gene; and

     (ii)     administering to an individual having the ER22/23KK polymorphism a therapeutically effective amount of an agent which prevents or treats the metabolic disorder.

15.     A method for increasing the life expectancy of an individual, the method comprising:

     (i)     detecting in a sample from the individual the presence or absence of the ER22/23EK polymorphism in the glucocorticoid receptor gene; and

     (ii)     introducing into the individual an allele of the glucocorticoid receptor gene or a glucocortidicoid receptor, wherein said gene or polypeptide does not have said polymorphism.

16.     A method for identifying an agent for use in the treatment of a metabolic disorder or for increasing life expectancy, the method comprising:

     (i)     contacting a glucocorticoid receptor polypeptide having the sequence shown in SEQ ID NO: 1 or a fragment thereof which includes the ER22/23EK polymorphism with a test agent;

     (ii)     monitoring binding of the test agent to the polypeptide; and

     (iii)     determining whether said test agent may increase life expectancy or be suitable for treating a metabolic disease, wherein for increasing life expectancy or treating a metabolic disease agent is one that binds to the polypeptide.

17.     A method according to claim 16 wherien said glucocorticoid receptor polypeptide is in a non-human animal which is transgenic for a polynucleotide having the sequence shown in SEQ ID NO: 1.